IN THE CLAIMS

Please amend the claims as follows.

1.-27. (Canceled)

28. (Currently Amended) A standoff bioagent detection system comprising:

a detector to detect a fluorescence level; and

a controller configured to initially cause a plurality of laser diodes to generate a range of ultraviolet wavelengths;

wherein when the detector detects that a fluorescence level of an aromatic protein resulting from the range ultraviolet wavelengths exceeds a threshold, the controller is further configured to:

address selected pairs of the laser diodes to alternately ~~sequentially~~ generate first and second ultraviolet wavelengths by sequentially pulsing the selected pairs in rapid succession, both the first and second wavelengths selected to fluoresce the detected aromatic protein; and

resolve in time and separately correlate detected fluorescence levels resulting from sequential transmission of the first and second ultraviolet wavelengths to determine a differential absorption level,

wherein the second ultraviolet wavelength and ~~includes a calibrated wavelength offset from~~ the first ultraviolet wavelength are separated by no more than approximately five nanometers.

29. (Currently Amended) The standoff bioagent detection system of claim 28 wherein the controller is further configured to compare the differential absorption level with a calibrated differential value to determine whether an elevated level of a predetermined aromatic protein is present,

wherein the selected pairs of the laser diodes are selected to separately generate first and second ultraviolet wavelengths to fluoresce the predetermined aromatic protein, [[and]]

wherein the calibrated wavelength offset is selected so that both the first and second ultraviolet wavelengths have similar ~~for detection of differences in~~ atmospheric absorption levels, and

wherein the first and second wavelengths are between approximately 270 and 340 nanometers.

30. (Previously Presented) The standoff bioagent detection system of claim 29 wherein the laser diodes comprise an addressable array of laser diodes,

wherein the first and second ultraviolet wavelengths comprise a pair of ultraviolet wavelengths, and

wherein the controller is further configured to repeat the addressing, the resolving in time and the correlation for other pairs of ultraviolet wavelengths to detect corresponding other aromatic proteins based on differential absorption levels.

31. (Currently Amended) A method to detect bioagents using differential absorption comprising:

generating a range of ultraviolet wavelengths with a plurality of laser diodes; and

detecting a fluorescence level of an aromatic protein in response to the generating,

wherein when a detected fluorescence level of an aromatic protein resulting from the range ultraviolet wavelengths exceeds a threshold, the method further comprises:

addressing selected pairs of the laser diodes to alternately ~~sequentially~~ generate first and second ultraviolet wavelengths by sequentially pulsing the selected pairs in rapid succession, both the first and second wavelengths selected to fluoresce the detected aromatic protein; and

resolving in time and separately correlating detected fluorescence levels resulting from sequential transmission of the first and second ultraviolet wavelengths to determine a differential absorption level,

wherein the second ultraviolet wavelength and ~~includes a calibrated wavelength offset from~~ the first ultraviolet wavelength are separated by no more than approximately five nanometers.

32. (Currently Amended) The method of claim 31 further comprising comparing the differential absorption level with a calibrated differential value to determine whether an elevated level of a predetermined aromatic protein is present,

wherein the selected pairs of the laser diodes are selected to separately generate first and second ultraviolet wavelengths to fluoresce the predetermined aromatic protein, [[and]]

wherein the calibrated wavelength offset is selected for so that both the first and second ultraviolet wavelengths have similar ~~for detection of differences in~~ atmospheric absorption levels, and

wherein the first and second wavelengths are between approximately 270 and 340 nanometers.

33. (Previously Presented) The method of claim 32 wherein the laser diodes comprise an addressable array of laser diodes,

wherein the first and second ultraviolet wavelengths comprise a pair of ultraviolet wavelengths, and

wherein when the detected fluorescence level resulting from the range ultraviolet wavelengths exceeds the threshold, the method further comprises repeating the addressing, the resolving in time and the correlating for other pairs of ultraviolet wavelengths to detect corresponding other aromatic proteins based on differential absorption levels.